

FIG. 1A

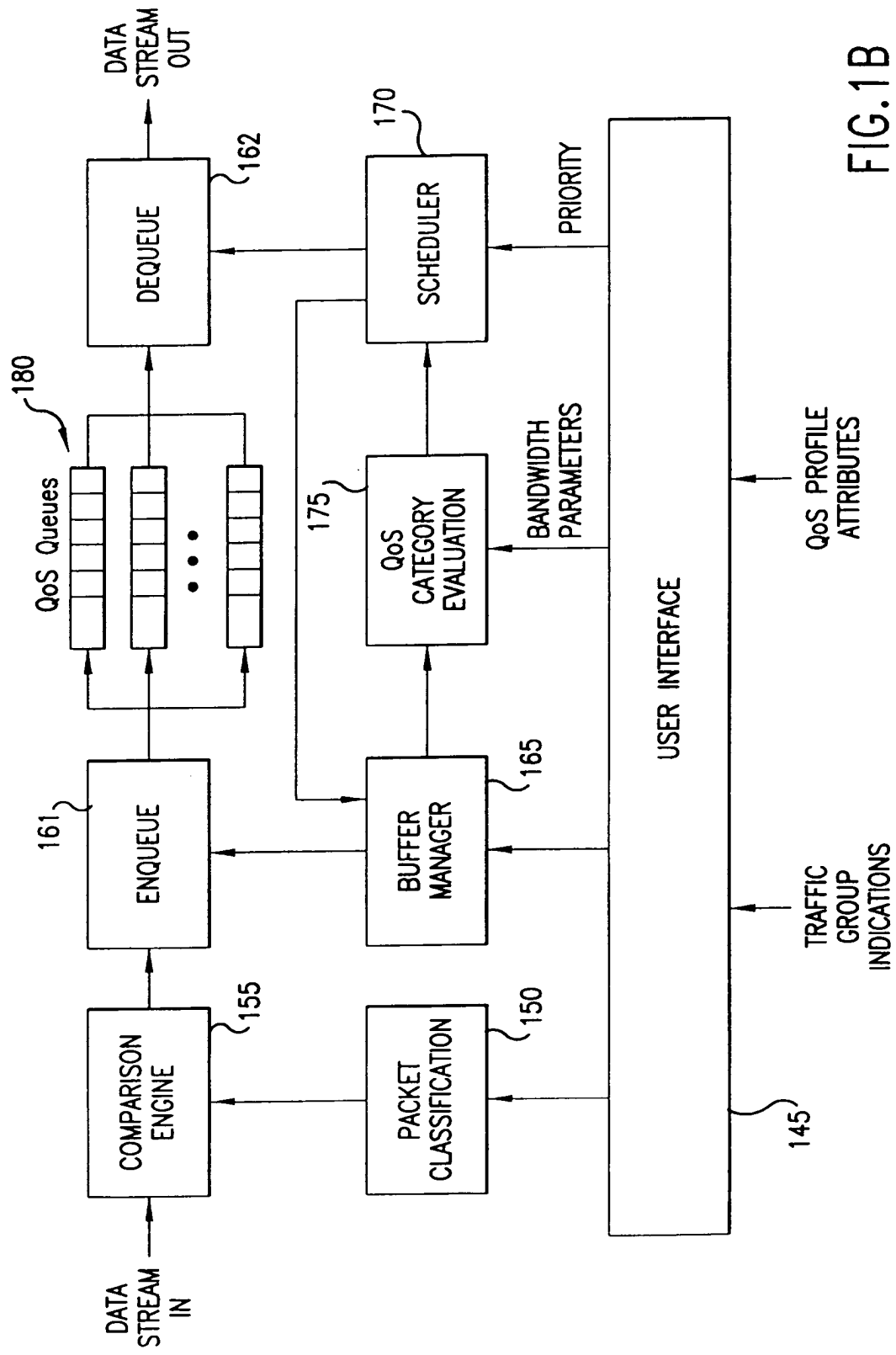


FIG. 1B

BANDWIDTH MANAGEMENT AND TRAFFIC PRIORITIZATION

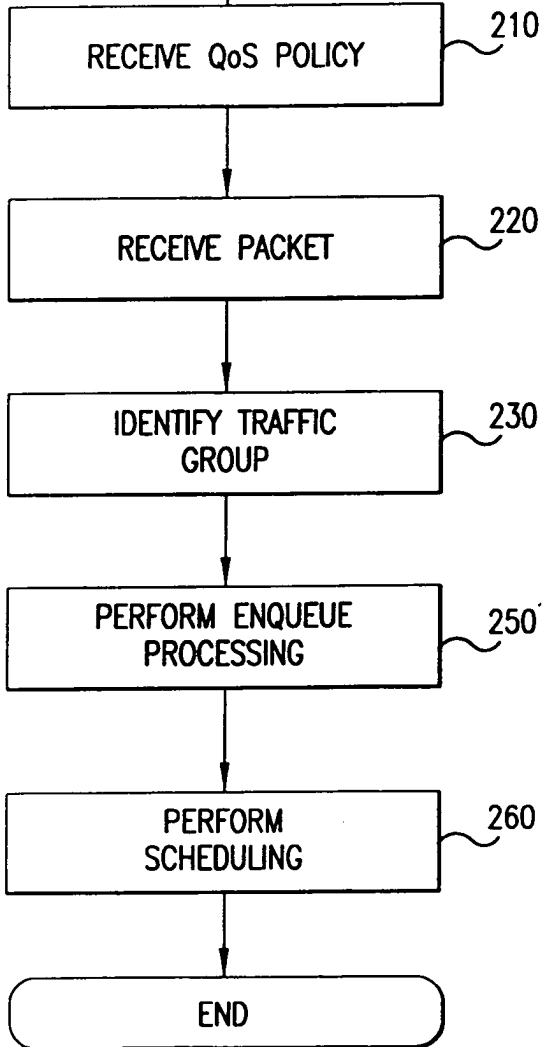


FIG. 2

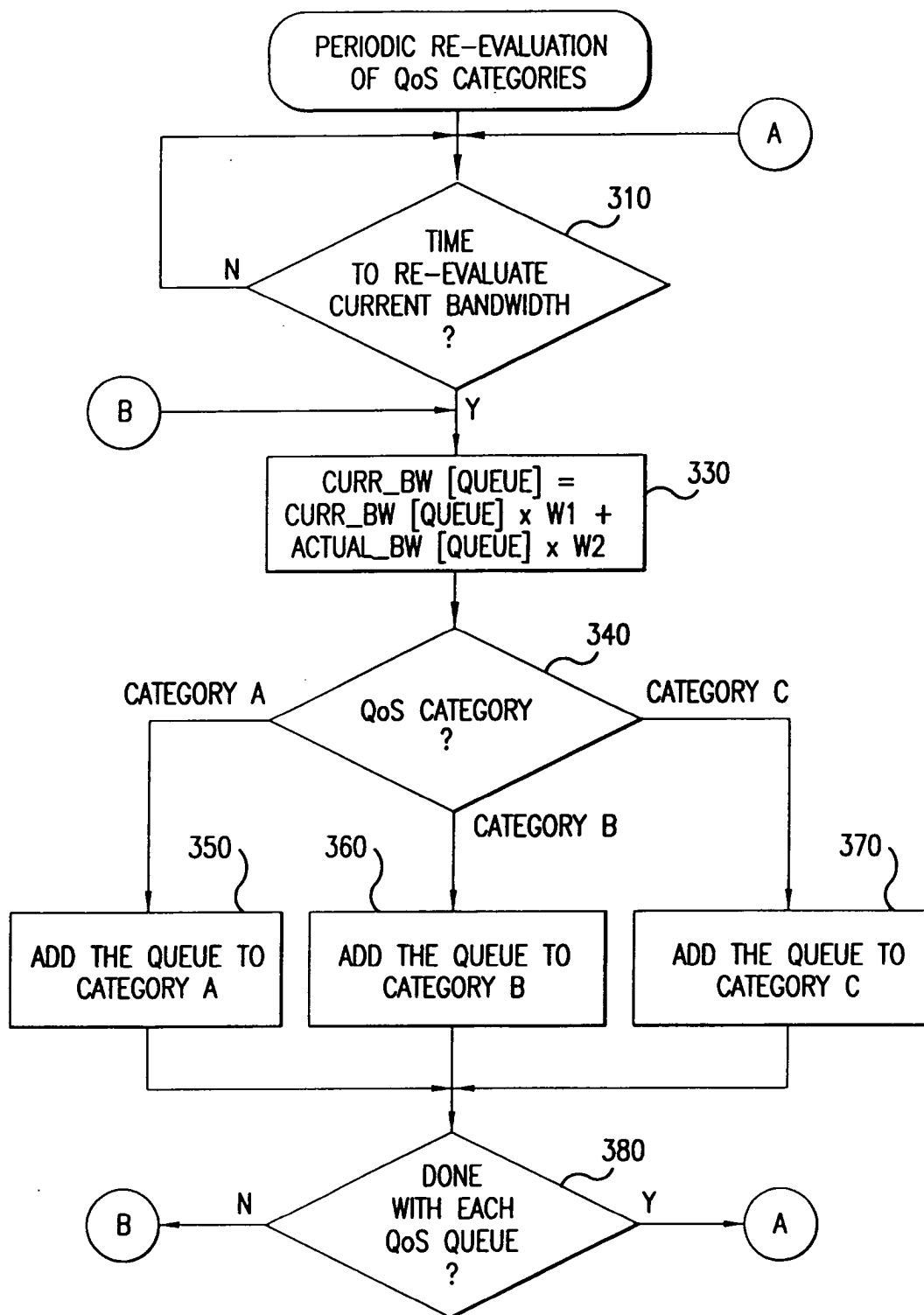


FIG.3

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graph TD
    Start([C]) --> 410{IS THE  
PORT READY FOR  
THE NEXT PACKET  
?}
    410 -- N --> Start
    410 -- Y --> 420[SELECT APPROPRIATE QoS  
CATEGORY WITH PENDING DATA]
    420 --> 430{MULTIPLE  
QoS QUEUES IN THE  
SELECTED QoS  
CATEGORY  
?}
    430 -- Y --> A((A))
    A --> 440[PERFORM PRIORITY  
SCHEDULING ON  
THE QoS QUEUES IN  
THE SELECTED QoS  
CATEGORY]
    440 --> 450{450  
TIE  
?}
    450 -- N --> 460[460  
PERFORM ROUND  
ROBIN OR LRU  
SCHEDULING ON  
THE QoS QUEUES  
IN THE SELECTED  
QoS CATEGORY]
    450 -- Y --> 460
    460 --> B((B))
    B --> 470[470  
DEQUEUE NEXT PACKET FROM  
THE SELECTED QoS QUEUE]
    470 --> 480[480  
TRANSMIT THE  
PACKET]
    480 --> C((C))
    C --> 410

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FIG.4